

蝶と蛾 *Tyô to Ga* 45 (1): 5-10, March 1994

Three new species of Lycaenidae (Lepidoptera) from Sulawesi

Yusuke TAKANAMI

25-11, Kyonan-cho 2 chome, Musashino-shi, Tokyo, 180 Japan

Abstract New species of Lycaenidae, *Hypolycaena sohmai*, *Jamides tsukadai* and *Jamides halus* are described and illustrated from Sulawesi, Indonesia.

Key words Lycaenidae, *Hypolycaena*, *Jamides*, new species, Sulawesi, taxonomy.

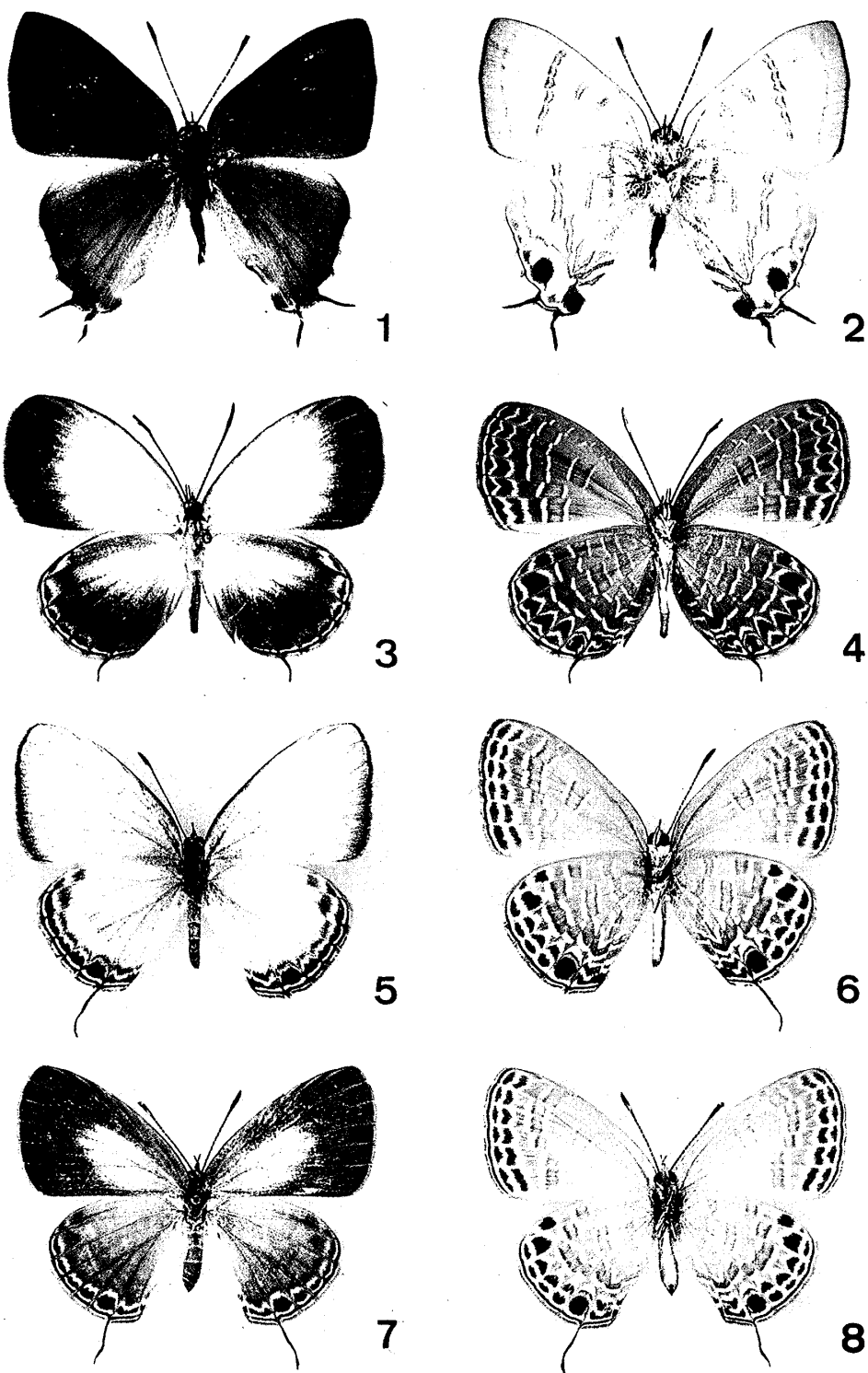
Hypolycaena sohmai sp. n. (Figs 1-2, ♂ genitalia fig. 9)

♂. Body: Antenna with rather abrupt cylindrical club; club black, pale brown apically; shaft checkered with black and white; nudum confined to club; segments number 26. Eyes hairy. Palpi with third segment as long as second segment, clothed with long scales, not prominently hairy. Tarsi and tibiae banded with black and white scales. Fore tarsus spinous ventrally, ending in a tapered, down-curved point. Thorax and abdomen dark grey with bluish scales dorsally, white ventrally. Upperside of wings: Shining bright blue. Forewing with costal and distal blackish borders; a faint, triangular brand composed of normal scales but darker in colour than the surroundings at the base of spaces 2 and 3; cilia greyish. Hindwing with a costal border whitish in spaces 7 and 8, dark greyish in space 6; tails black, tipped with white, at vein 1b and 2; tornal lobe black, with a marginal white line; cilia whitish, but basally blackish at the end of each vein. Underside of wings: Greyish white, with a tinge of yellow. Forewing distal margin dark brown with a yellowish submarginal area, and with a fuscous submarginal line; a postdiscal orange band narrowly edged with faint fuscous lines on both sides; a shorter band, of the same colour as postdiscal band, at the end-cell and at the middle in cell. Hindwing with a distal marginal black line, edged with white inwardly; a large submarginal black spot in space 2 and in lobe, with smaller fuscous spots in spaces 1b and 3 to 6; a large submarginal yellow area in spaces 1b to 3; a few metallic green scales along vein 1b; a submarginal lunulate line from spaces 1b to 7, connected with the second yellow band in space 1a; a postdiscal orange band narrowly edged on both sides with faint fuscous lines; the postdiscal band completely dislocated inwardly at veins 1b, 2 and 4, resembling the letter V standing on the yellow area in space 1b, and passing obliquely to dorsum, with a similar orange band parallel to it at the submargin in space 1a; a short double fuscous lines at the end-cell; an orange band in the middle of cell and subbase of space 7 across vein 7. Forewing length: 16 mm. Male genitalia (fig. 9): Dorsum large; sociuncus rounded in lateral view; brachium long, hooked; a well marked ridge between tegumen and vinculum; vinculum broad; saccus short produced; valvae rather small, distal half bifurcated; juxta obsolete; phallus long, rather slender; vesica with a pair of long and spinous cornuti.

♀. Unknown.

Holotype. ♂, Pulu Pulu, alt. ca. 1,800 m, north of Rantepao, near Palopo, Sulawesi Selatan, 25. ix. 1984, in Mr K. Sohma Collection (Tama/Tokyo).

Remarks. The present new species resembles *Hypolycaena shirozui* (H. Hayashi, 1981) on



Figs 1-2. *Hypolycaena sohmai* sp. n., holotype ♂. 1. Upperside. 2. Underside.
 Figs 3-4. *Jamides tsukadai* sp. n., holotype ♂. 3. Upperside. 4. Underside.
 Figs 5-6. *Jamides halus* sp. n., holotype ♂. 5. Upperside. 6. Underside.
 Figs 7-8. *Jamides halus* sp. n., paratype ♀. 7. Upperside. 8. Underside.

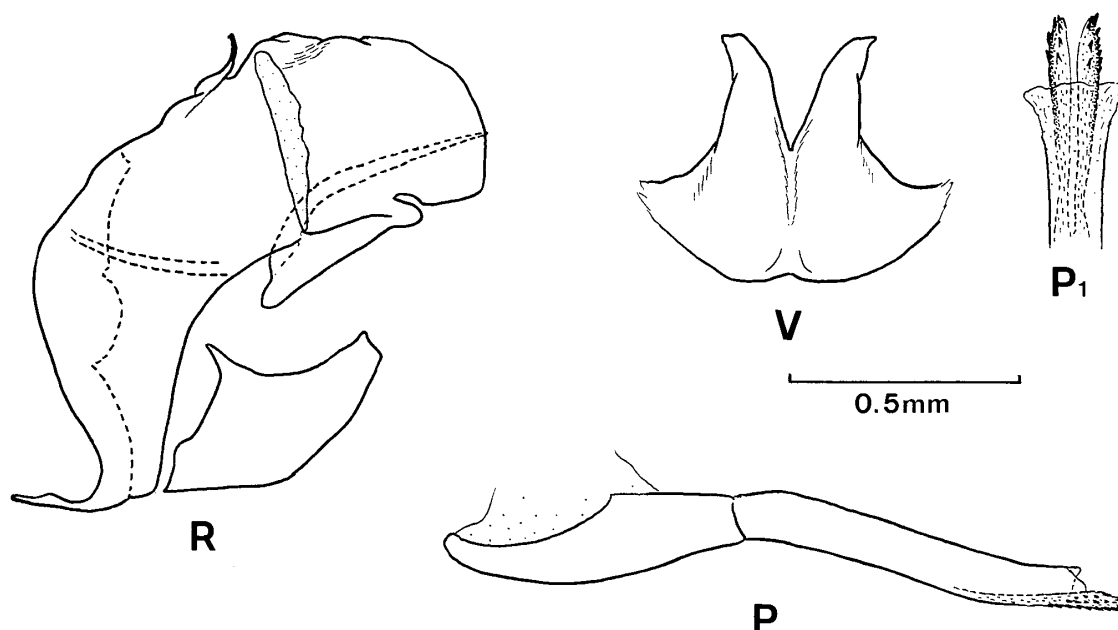


Fig. 9. *Hypolycaena sohmai* sp. n., holotype, ♂ genitalia. R: Ring with valvae, lateral view. P: Phallus, lateral view. P₁: Phallus end, ventral view. V: Valvae, ventral view.

the upperside, and *Hypolycaena umbrata* Seki & Takanami, 1988 on the underside, but is easily distinguished from the latter two species in having an additional orange bar in the middle of the cell on the underside of both wings.

***Jamides tsukadai* sp. n.** (Figs 3-4, ♂ genitalia fig. 10)

♂. Upperside of wings: Resembling *Jamides celeno kalawarus* (Ribbe, 1926) from Palu area in central Sulawesi; androconial scale absent; ground colour chalk white; distal dark greyish brown borders very broad on both wings; a marginal white line with an obscure submarginal white lunule at each space on hindwing. Underside of wings: Resembling *Jamides snelleni* (Röber, [1886]) and *Jamides cyta zelea* (Fruhstorfer, 1916) both from Sulawesi; ground colour greyish brown with a faint purplish tint, rather darker than in *snelleni* and *cyta*; forewing with white striae as in *cyta*, but a pair of whitish bars additionally present in spaces 9, 10 and 11; hindwing markings as in *snelleni* and *cyta*, except the band of postdiscal white striae completely dislocated at vein 1b, with the portion in space 1b shift outwardly. Forewing length: 15-18 mm. Wing shape roundish, like that of *Jamides philatus philatus* (Snellen, 1878). Tail about 2.5 mm in length. Male genitalia (fig. 10): Resembling those of *Jamides celeno*, but the bifurcate distal process of valvae prominently elongated in present new species. Phallus with spinous cornuti, but without the terminal spine-like process (Chapman's process).

♀. Unknown.

Holotype ♂ (Forewing length, 18 mm), Kulawi, nr Palu, Sulawesi Tengah, 8. ii. 1982, preserved in Mr Etsuzo Tsukada Collection (Azumino Butterflies Research Institute, Matsumoto/Nagano). Paratypes: 2 ♂, nr Palopo, Sulawesi Selatan, ix. 1978, preserved in the same location as holotype; 1 ♂, Ranteballa, nr Palopo, Sulawesi Selatan, 3. ix. 1982,

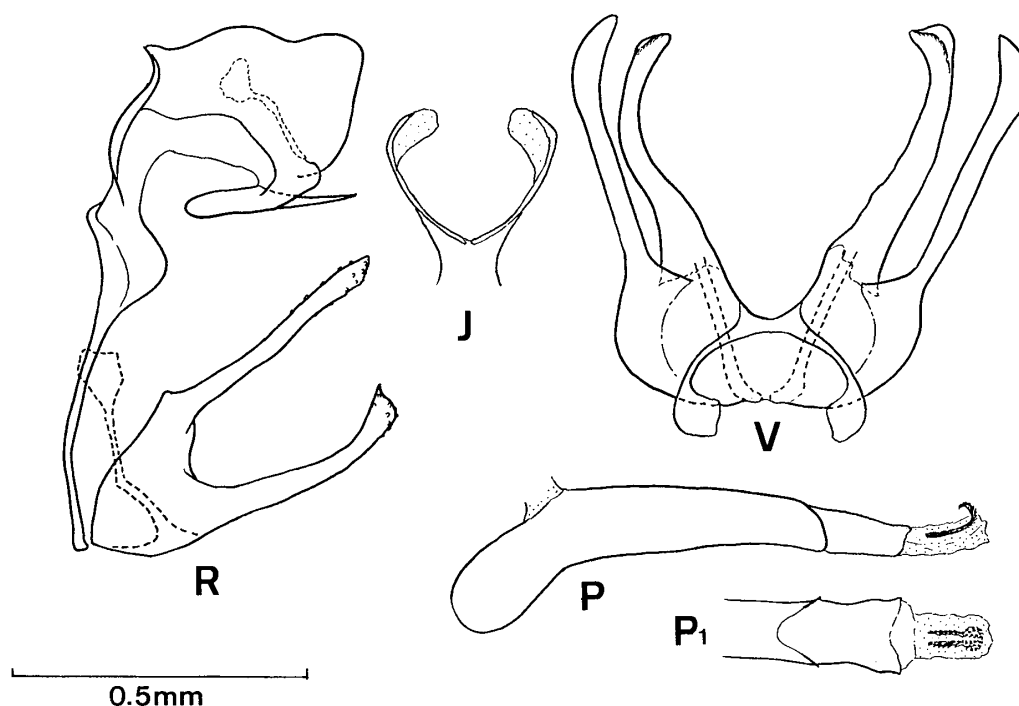


Fig. 10. *Jamides tsukadai* sp. n., paratype, ♂ genitalia. R: Ring with valvae, lateral view. P: Phallus, lateral view. P₁: Phallus end, dorsal view. V: Valvae with juxta, ventral view. J: Juxta.

in Mr Kunihiro Sohma Collection (Tama/Tokyo).

***Jamides halus* sp. n.** (Figs 5-8, ♂ genitalia fig. 11)

♂. Upperside of wings: Resembling *Jamides callistus* (Röber, [1886]) from the Philippines; androconial scale absent; ground colour shining pale sky blue with slight lilac tint, rather duller than in *callistus*; forewing distal margin narrowly blackened, broadened towards tornus; hindwing marginal and submarginal black markings more prominent than in *Jamides callistus amastris* (Fruhstorfer, 1916) from Mindanao. Underside of wings: All the markings like those of *Jamides pseudosias echeilea* (Fruhstorfer, 1916) from Sulawesi, but differing in the followings: ground colour light greyish brown with yellow tone, lighter than in *echeilea*; whitish striae rather diffuse, slightly tinged with yellow; forewing postdiscal whitish striae in spaces 1b-3 not forming a band with the bars at the end of cell; discal and postdiscal bands of whitish striae on both wings inwardly darker edged. Tail about 5 mm in length. Forewing length: 16-18 mm. Male genitalia (fig. 11): Resembling those of *Jamides pseudosias* and *Jamides alecto latimargus* (Snellen, 1878) from Sulawesi, but vinculum strongly angled, and the trunk of valvae warped and the apical process outwardly pointed.

♀. Upperside of wings: Forewing pale sky bluish white, with very broad marginal dark greyish brown borders; hindwing greyish brown with discal faint bluish scales, and marginal and submarginal whitish markings. Underside of wings: same as in the male. Forewing length: 16 mm.

Holotype ♂ (forewing length, 18 mm), Palopo, Sulawesi Selatan, ix. 1978. Paratypes: 1 ♂, same data as in holotype; 1 ♀, Bantimurung, Sulawesi, Selatan, x. 1980. All the types

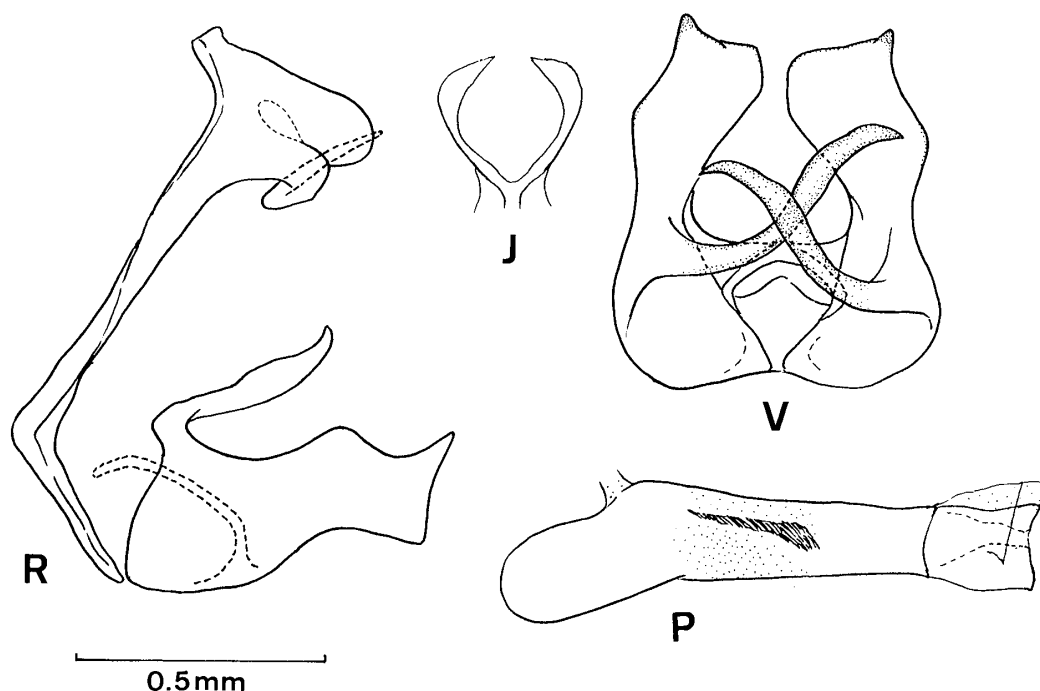


Fig. 11. *Jamides halus* sp. n., paratype, ♂ genitalia. R: Ring with valvae, lateral view. P: Phallus, lateral view. V: Valvae with juxta, ventral view. J: Juxta.

are preserved in Mr Etsuzo Tsukada Collection (Azumino Butterflies Research Institute, Matsumoto/Nagano).

Acknowledgements

I express my gratitude to Mr Etsuzo Tsukada (Matsumoto/Nagano) and Mr Kunihiro Sohma (Tama/Tokyo) for their generous permission to study the specimens here described. I am also grateful to Dr Toshiya Hirowatari (University of Osaka Prefecture/Sakai, Osaka) for giving me helpful information on the genus *Jamides*.

References

- Fruhstorfer, H., 1916. Revision der Gattung *Lampides* auf Grund anatomischer Untersuchungen. *Arch. Naturgesch.* **81** (1915) (A) (6): 1-46, pls 1-2.
- Hayashi, H., 1981. New Lycaenid butterflies from the Philippines. *Tyô Ga* **32**: 63-82.
- Hirowatari, T., 1992. A generic classification of the tribe Polyommata of the Oriental and Australian regions. *Bull. Univ. Osaka Prefect.* (B)**44** (Suppl.): 1-102.
- Ribbe, C., 1926. Neue Lycaenenformen, hauptsächlich von Celebes. *Ent. Mitt.* **15**: 78-91.
- Röber, J., [1886]. Neue Tagschmetterlinge der indo-australischen Fauna. *CorrespBl. ent. Ver. Iris* **1**: 45-72, pls 2-5.
- Seki, Y. & Y. Takanami, 1988. A new species of Genus *Hypolycaena* from Sulawesi, Indonesia. *Tyô Ga* **39**: 183-186.
- Snellen, P. C. T., 1878. In Piepers, M. C. Opgave van, En aanteekeningen over Lepidoptera in Zuid-West Celebes verzaeld. *Tijdschr. Ent.* **21**: 1-43, pls 1-2.
- Takanami, Y., 1989. On some type specimens of Lycaenidae from South East Asia. *Tyô Ga* **40**: 23-80.

摘 要

スラウェシ島産シジミチョウの3新種 (高波雄介)

Hypolycaena sohmai sp. n. (Figs 1-2, ♂ genitalia fig. 9)

♂表面は、フィリピン・ミンダナオ島などに産する *Hypolycaena shirozui* (H. Hayashi, 1981) に似た光沢を持つ美しい青色だが、輝きはほとんど紫色を帯びない。また裏面は同じくスラウェシ島に産する *Hypolycaena umbrata* Seki & Takanami, 1988 に似るが、地色は白味が強く、前後翅ともに、中室中央部に他種には見られない橙色条を現す。今のところスラウェシ島中部 Tana Toraja 地方で得られた1♂のみが知られる。

Jamides tsukadai sp. n. (Figs 3-4, ♂ genitalia fig. 10)

♂表面は一見してそれと判る特異な種で、幅広い黒縁は同地方に産する *Jamides celeno kalawarus* (Ribbe, 1926) に似る。裏面はいわゆるスラウェシ顔で亜外縁部の白条間が目立って黒くなり、丸い翅形が *Jamides philatus philatus* (Snellen, 1878) を思わせる。しかし白条などの斑紋は *Jamides snelleni* (Röber, [1886]) や *Jamides cyta zelea* (Fruhstorfer, 1916) に似ている。特に前翅前縁部の1対の白条は、前翅第9, 10室に加え第11室内にも微かながらも現れる。♂交尾器, valvae は *celeno* のそれを引き伸ばしたような形だが, phallus には *celeno* に見られるような末端部腹面の細長い突起を欠く。スラウェシ島中部から少数の♂が得られている。

Jamides halus sp. n. (Figs 5-8, ♂ genitalia fig. 11)

♂表面はフィリピンの *Jamides callistus* (Röber, [1886]) に似るが、淡い空色の色調はやや鈍くいくらか藤色を帯び、外縁、亜外縁の黒色部はやや発達する。♂裏面の斑紋は同じスラウェシ産の *Jamides pseudosias echeilea* (Fruhstorfer, 1916) に似るが、地色は全体にやや黄ばみ、前翅中央部の白条は中室端の白条と一列につながらない。♂交尾器は *Jamides alecto latimargus* (Snellen, 1878) などに似るが、vinculum は強く曲がり, valvae も波状に歪む。♀表面も前述3種のものに似るが、前翅黒縁は幅広く、後翅では亜外縁部の白条を除きほとんど灰褐色となる。スラウェシ島中部、南西部から得られている。

(Accepted November 11, 1993)